IN THE CLAIMS:

Please cancel Claim 22 without prejudice or disclaimer of subject matter. Please amend the claims as follows. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) An image processing apparatus comprising:

attribute information generation means for generating attribute information indicating an attribute of an image in correspondence with a command that represents the image;

bitmap data generation means for generating bitmap image data by rendering the command; ~~and~~

attribute synthesis means for, if first and second bitmap image data generated in accordance with first and second commands overlap each other, synthesizing attribute information at the overlapped position of the first bitmap image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule; and

image processing means for performing an image process [[of]] on the bitmap image data in accordance with the attribute information[[,]]

~~wherein attribute information at an overlapping position of first and second images in accordance with the command is determined in accordance with attribute information of the first image and attribute information of the second image~~.

2. (Original) The apparatus according to claim 1, wherein the image process is a resolution converting process.

3. (Original) The apparatus according to claim 1, wherein said bitmap data generation means generates bitmap image data by overwriting a rendered bitmap image.

4. (Currently Amended) The apparatus according to claim 1, wherein the image process is at least one of a dither process and ~~a~~n under color removal ~~UCR~~ process.

5. (Original) The apparatus according to claim 1, wherein the image process is one of a filter process and compression process.

6. (Currently Amended) The apparatus according to claim 1, wherein the ~~attribute information at the overlapping position of the first and second images is determined by~~ predetermined rule is one of an AND, OR, overwrite priority, and background priority using the attribute information of the first bitmap image and the attribute information of the second bitmap image.

7. (Original) The apparatus according to claim 1, further comprising one of laser print means and ink-jet print means for printing the image that has undergone the image process.

8. (Original) The apparatus according to claim 1, wherein the attribute information is generated for each pixel and has at least one of vector, character, and color attributes.

9. (Currently Amended) An image processing apparatus comprising:

discrimination means for discriminating a type of object in an image to be rendered;

determination means for determining the presence/absence of synthesis of the discriminated object with other objects;

first synthesis means for synthesizing ~~an object and information of the type of object~~ objects in accordance with the determination result; ~~and~~

second synthesis means for synthesizing object type information of objects discriminated by said discrimination means; and

processing means for appending object type information ~~indicating the type of synthesized object~~ synthesized by said second synthesis means to a rendering result obtained by rendering the object to be rendered in units of pixels.

10. (Original) The apparatus according to claim 9, wherein the type of object to be rendered includes information indicating if an object is a bitmap or a vector graphic.

11. (Original) The apparatus according to claim 9, wherein the type of object to be rendered includes information indicating if an object is a color or monochrome object.

12. (Original) The apparatus according to claim 9, wherein the type of object to be rendered includes information indicating if an object is a character or an object other than the character.

13. (Original) The apparatus according to claim 9, wherein the type of object to be rendered includes information indicating if an object is a tone or resolution priority object.

14. (Currently Amended) The apparatus according to claim 9, further comprising image processing means for performing an image process [[of]] on data of the rendering result in accordance with the information of the type of object.

15. (Original) The apparatus according to claim 14, wherein the image process includes a binarization process, filter process, and black character extraction process.

16. (Original) The apparatus according to claim 15, wherein the image process outputs rendered data using black alone when it is determined in accordance with information of the object that the object is a black character.

17. (Currently Amended) The apparatus according to claim 9, wherein said second synthesis means synthesizes ~~the object~~ the object type information of the objects in accordance with one of synthesis modes including ~~or, and, xor,~~ OR, AND, XOR and α blend.

18. (Currently Amended) The apparatus according to claim 9, wherein the synthesis of first and second synthesis means is inhibited upon receiving an inhibition command of the synthesis process.

19. (Original) The apparatus according to claim 18, wherein the inhibition command is input by a printer driver of a host computer connected to said image processing apparatus.

20. (Original) The apparatus according to claim 9, wherein the synthesis is done for at least two different objects.

21. (Currently Amended) An image processing apparatus for processing and outputting input image data, comprising:

input means for inputting image data composed of a plurality of objects;

rendering means for rendering the objects into bitmap image data;

generation means for generating attribute map information indicating a configuration of the bitmap image data on the basis of the bitmap image data rendered by said rendering means and attributes of the objects; and

determination means for determining a range of the bitmap image data, which is to undergo ~~a predetermined image process~~ an image area discrimination of discriminating a character/line image region, on the basis of the attribute map information generated by said generation means.

22. (Canceled)

23. (Original) The apparatus according to claim 21, wherein the attribute map information includes at least a vector flag and bitmap flag.

24. (Original) The apparatus according to claim 21, wherein the attribute map information is generated in correspondence with two-dimensional coordinate positions of the bitmap image data.

25. (Original) The apparatus according to claim 21, wherein said generation means comprises an attribute map memory for storing the generated attribute map information.

26. (Original) The apparatus. according to claim 21, wherein when the bitmap image data is managed in units of R, G, and B planes, the attribute map information is managed as an attribute map plane added to the R, G, and B planes.

27. (Original) The apparatus according to claim 21, wherein when R, G, and B data of the bitmap image data are managed in units of pixels, the attribute map information is managed while being appended to each pixel.

28. (Original) The apparatus according to claim 21, wherein when the bitmap image data is managed in units of R, G, and B planes, the attribute map information is managed while being appended to pixels of one or a plurality of the R, G, and B planes.

29. (Original) The apparatus according to claim 21, wherein when R, G, and B data of the bitmap image data are managed in units of pixels, the attribute map information is managed while being appended to color information of one or a plurality of R, G, and B data in units of pixels.

30. (Original) The apparatus according to claim 21, wherein said determination means comprises image area separation processing means for performing an image area separation process for the bitmap image data.

31. (Original) The apparatus according to claim 21, wherein said determination means updates the attribute map information on the basis of a processing result of said image area separation processing means.

32. (Currently Amended) An image processing method comprising:

~~the~~ an attribute information generation step of generating attribute information indicating an attribute of an image in correspondence with a command that represents the image;

~~the~~ a bitmap data generation step of generating bitmap image data by rendering the command; ~~and~~

an attribute synthesis step of, if first and second bitmap image data generated in accordance with first and second command overlap each other, synthesizing attribute information at the overlapped position of the first bitmap image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule; and

~~the~~ an image processing step of performing an image process [[of]] on the bitmap image data in accordance with the attribute information[[,]]

~~wherein attribute information at an overlapping position of first and second images in accordance with the command is determined in accordance with attribute information of the first image and attribute information of the second image~~.

33. (Currently Amended) A storage medium which stores program codes which are loaded and executed by a computer to make the computer function as an image processing apparatus, said program codes ~~storing~~ comprising codes to perform the steps of:

~~a program code of the~~ an attribute information generation step of generating attribute information indicating an attribute of an image in correspondence with a command that represents the image;

~~a program code of the~~ a bitmap data generation step of generating bitmap image data by rendering the command; ~~and~~

an attribute synthesis step of, if first and second bitmap image data generated in accordance with first and second commands overlap each other, synthesizing

attribute information at the overlapped position of the first bitmap image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule; and

~~a program code of the~~ an image processing step of performing an image process [[of]] on the bitmap image data in accordance with the attribute information[[,]]

~~wherein attribute information at an overlapping position of first and second images in accordance with the command is determined in accordance with attribute information of the first image and attribute information of the second image~~.

34. (Currently Amended) An image processing method comprising:

~~the~~ a discrimination step of discriminating a type of object in an image to be rendered;

~~the~~ a determination step of determining the presence/absence of synthesis of the discriminated object with other objects;

~~the~~ a first synthesis step of synthesizing ~~an object and information of the type of object~~ objects in accordance with the determination result; ~~and~~

a second synthesis step of synthesizing object type information of objects discriminated by the discrimination step; and

~~the~~ a processing step of appending object type information ~~indicating the type of synthesized object~~ synthesized by the second synthesis step to a rendering result obtained by rendering the object to be rendered in units of pixels.

35. (Currently Amended) A storage medium which stores program codes which are loaded and executed by a computer to make the computer function as an image processing apparatus, said program codes ~~storing~~ comprising codes to perform the steps of:

~~a program code of the~~ discrimination step of discriminating a type of object in an image to be rendered;

~~a. program code of the~~ determination step of determining the presence/absence of synthesis of the discriminated object with other objects;

~~a program code of the~~ a first synthesis step of synthesizing ~~an object and information of the type of object~~ objects in accordance with the determination result; ~~and~~

a second synthesis step of synthesizing object type information of objects discriminated by the discrimination step; and

~~a program code of the~~ a processing step of appending object type information ~~indicating the type of synthesized object~~ synthesized by the second synthesis step to a rendering result obtained by rendering the object to be rendered in units of pixels.

36. (Currently Amended) An image processing method for processing and outputting input image data, comprising:

~~the~~ an input step of inputting image data composed of a plurality of objects;

~~the~~ a rendering step of rendering the objects into bitmap image data;

~~the~~ a generation step of generating attribute map information indicating a configuration of the bitmap image data on the basis of the bitmap image data rendered in the rendering step and attributes of the objects; and

~~the~~ a determination step of determining a range of the bitmap image data, which is to undergo ~~a predetermined image process~~ an image area discrimination of discriminating a character/line image region, on the basis of the attribute map information generated in the generation step.

37. (Currently Amended) A storage medium which ~~computer readable memory that~~ stores program codes which are loaded and executed by a computer to make

the computer function to perform [[of]] an image process for processing and outputting input image data, the program codes comprising codes to perform the steps of:

~~a program code of the~~ an input step of inputting image data composed of a plurality of objects;

~~a program code of the~~ a rendering step of rendering the objects into bitmap image data;

~~a program code of the~~ a generation step of generating attribute map information indicating a configuration of the bitmap image data on the basis of the bitmap image data rendered in the rendering step and attributes of the objects; and

~~a program code of the~~ a determination step of determining a range of the bitmap image data which is to undergo ~~a predetermined image process~~ an image area discrimination of discriminating a character/line image region, on the basis of the attribute map information generated in the generation step.